

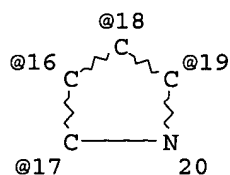
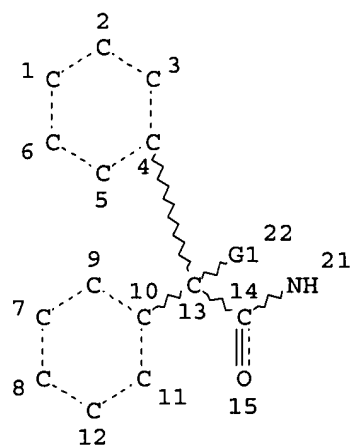
WEST Search History

DATE: Monday, January 08, 2007

Hide?	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
		<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L2	L1 and muscarin\$5	99
<input type="checkbox"/>	L1	(514/318.ccls. or 546/193.ccls. or 544/333.ccls. or 514/256.ccls.) and pyrrolidin\$5	2123

END OF SEARCH HISTORY

```
=> d l4
L4 HAS NO ANSWERS
L4 STR
```



```
VAR G1=16/17/18/19
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

```
GRAPH ATTRIBUTES:
RSPEC 17 4 10
NUMBER OF NODES IS 22
```

```
STEREO ATTRIBUTES: NONE
```

```
=> s l4 ful
FULL SEARCH INITIATED 10:15:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 967 TO ITERATE
```

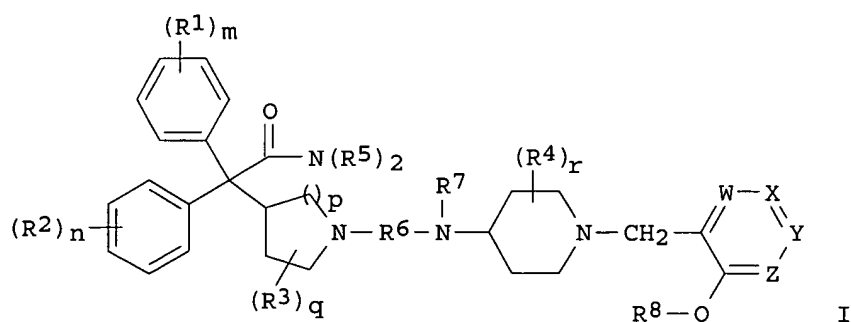
```
100.0% PROCESSED 967 ITERATIONS
SEARCH TIME: 00.00.01
```

822 ANSWERS

```
L6 822 SEA SSS FUL L4
```

AN 2005:74113 CAPLUS
 DN 142:176696
 TI Preparation of substituted 4-amino-1-benzylpiperidines as muscarinic M2 receptor antagonists
 IN Mammen, Mathai; Wilson, Richard; Dunham, Sarah; Hughes, Adam; Husfeld, Craig; Ji, Yu-Hua; Li, Li; Mischki, Trevor; Stergiades, Ioanna; Oare, David
 PA Theravance, Inc., USA
 SO PCT Int. Appl., 139 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007645	A1	20050127	WO 2004-US22264	20040709
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2005026954	A1	20050203	US 2004-888855	20040709
	EP 1644356	A1	20060412	EP 2004-778013	20040709
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
PRAI	US 2003-486337P	P	20030711		
	WO 2004-US22264	W	20040709		
OS	MARPAT 142:176696				
GI					



AB Title compds. I [W, X, Y, Z = CH, CR9; R6 = alkyloxyalkyl linker; R7-8 = H, alk(en/yn)yl, cycloalkyl, etc.; R9 = alk(en/yn)yl, cycloalkyl, etc.; R1-2 = alk(en/yn)yl, cycloalkyl, CN, etc.; R3-4 = alkyl, F; R5 = H, alk(en/yn)yl, cycloalkyl, aryl, etc.; m, n = 0-3; p = 1-2; q, r = 0-4] are prepared For instance, (S)-4-[N-[7-(3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-N-(methylamino)-1-(2,6-dimethoxybenzyl)piperidine is prepared by reaction of [1-(2,6-Dimethoxybenzyl)piperidin-4-yl]methylamine and (S)-3-(1-carbamoyl-1,1-diphenylmethyl)-1-(7-oxohept-1-yl)pyrrolidine (MeOH, NaCNBH3) in 4% yield as a lyophilized colorless solid. I are muscarinic M2 receptor

antagonists with $K_i < 100$ nM. I are useful for the treatment of disease conditions mediated by muscarinic receptors, such as overactive bladder, irritable bowel syndrome, asthma and chronic obstructive pulmonary disease.

IT 832083-73-5P, (S)-4-[N-[7-[3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]-3-oxahept-1-yl]-N-(isopropyl)amino]-1-(2-methoxybenzyl)piperidine

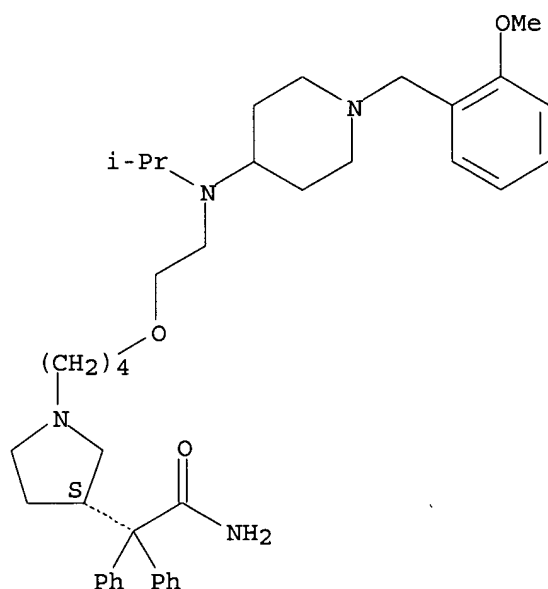
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted 4-amino-1-benzylpiperidines as muscarinic M2 receptor antagonists)

RN 832083-73-5 CAPLUS

CN 3-Pyrrolidineacetamide, 1-[4-[2-[[1-[(2-methoxyphenyl)methyl]-4-piperidiny] (1-methylethyl)amino]ethoxy]butyl]- α,α -diphenyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



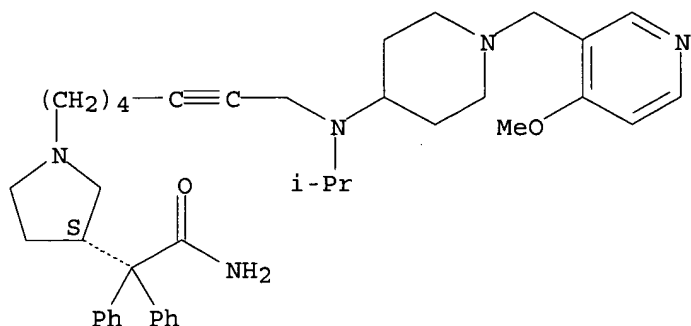
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN 2005:409502 CAPLUS
 DN 142:463611
 TI Preparation of naphthalene-1,5-disulfonic acid salts of a substituted
 4-amino-1-(pyridylmethyl)piperidine compound
 IN Wilson, Richard D.; Congdon, Julie; Mammen, Mathai; Zhang, Weijiang; Chao,
 Robert
 PA Theravance, Inc., USA
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005042514	A2	20050512	WO 2004-US35941	20041028
	WO 2005042514	A3	20060119		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2543012	A1	20050512	CA 2004-2543012	20041028
	US 2005113413	A1	20050526	US 2004-975657	20041028
	EP 1680416	A2	20060719	EP 2004-817483	20041028
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
	CN 1875017	A	20061206	CN 2004-80032279	20041028
PRAI	US 2003-515394P	P	20031029		
	WO 2004-US35941	W	20041028		

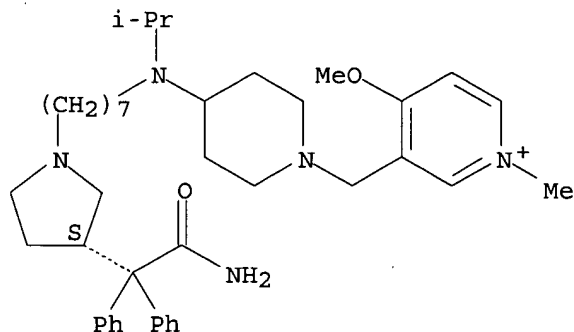
L16 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
 IT 690999-16-7P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]-2-heptyn-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of substituted 4-amino-1-(pyridylmethyl)piperidine naphthalene-1,5-disulfonic acid salts as muscarinic receptor antagonists for treating overactive bladder)
 RN 690999-16-7 CAPLUS
 CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]-5-heptynyl]- α,α -diphenyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



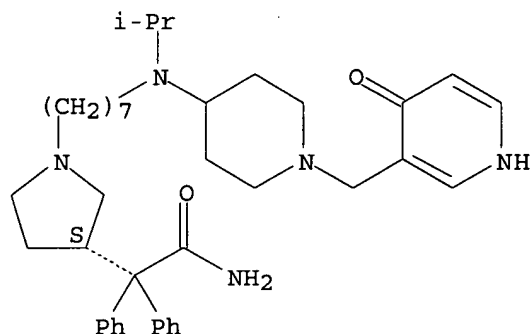
IT 851645-49-3P 851645-50-6P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-oxo-1,4-dihydropyridin-3-yl)methyl]piperidine
 RL: BYP (Byproduct); PREP (Preparation)
 (preparation of substituted 4-amino-1-(pyridylmethyl)piperidine naphthalene-1,5-disulfonic acid salts as muscarinic receptor antagonists for treating overactive bladder)
 RN 851645-49-3 CAPLUS
 CN Pyridinium, 3-[[4-[[7-[(3S)-3-(2-amino-2-oxo-1,1-diphenylethyl)-1-pyrrolidinyl]heptyl](1-methylethyl)amino]-1-piperidinyl]methyl]-4-methoxy-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



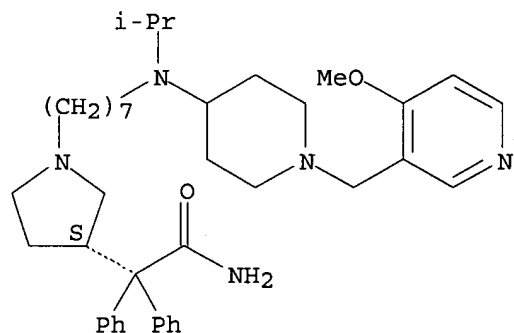
RN 851645-50-6 CAPLUS
 CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(1,4-dihydro-4-oxo-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 690999-15-6P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted 4-amino-1-(pyridylmethyl)piperidine naphthalene-1,5-disulfonic acid salts as muscarinic receptor antagonists for treating overactive bladder)
RN 690999-15-6 CAPLUS
CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-, (3S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



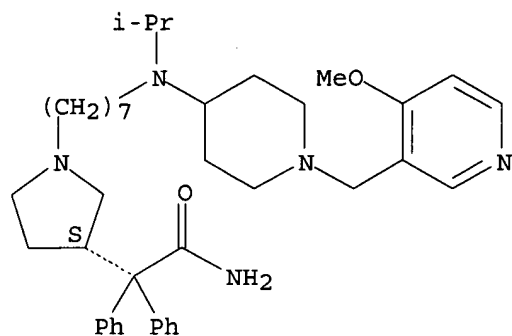
IT 690999-18-9P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine dimethanesulfonate
851645-42-6P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine naphthalene-1,5-disulfonate
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted 4-amino-1-(pyridylmethyl)piperidine naphthalene-1,5-disulfonic acid salts as muscarinic receptor antagonists for treating overactive bladder)
RN 690999-18-9 CAPLUS
CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-, (3S)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

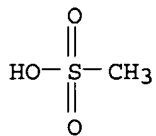
Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 851645-42-6 CAPLUS

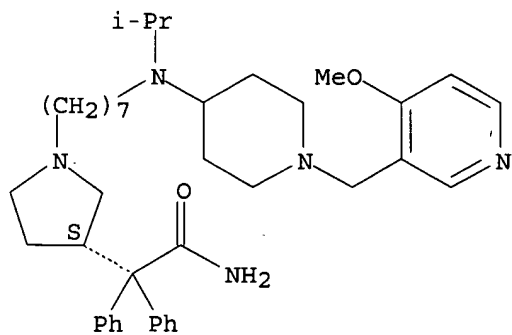
CN 1,5-Naphthalenedisulfonic acid, compd. with (3S)-1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]-α,α-diphenyl-3-pyrrolidineacetamide (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

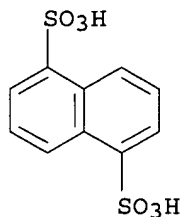
CMF C40 H57 N5 O2

Absolute stereochemistry.



CM 2

CRN 81-04-9
CMF C10 H8 O6 S2

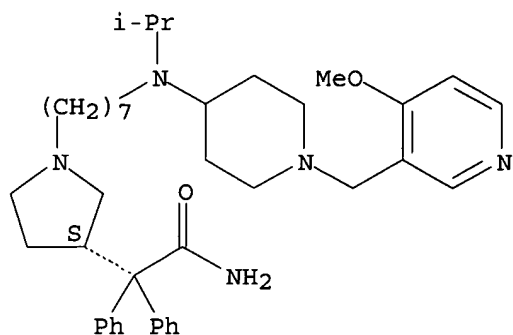


IT 690999-19-0P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine trimethanesulfonate
851645-45-9P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine Monosulfuric Acid Salt
851645-46-0P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine monotartaric acid salt
851645-47-1P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine diorotic acid salt
851645-48-2P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine disalicylic acid salt
851645-51-7P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine mononaphthalene-1,5-disulfonic acid salt
851645-55-1P, 4-[N-[7-[(S)-3-(1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl]heptan-1-yl]-N-(isopropyl)amino]-1-[(4-methoxypyridin-3-yl)methyl]piperidine dihydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted 4-amino-1-(pyridylmethyl)piperidine naphthalene-1,5-disulfonic acid salts as muscarinic receptor antagonists for treating overactive bladder)
RN 690999-19-0 CAPLUS
CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-, (3S)-, trimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6
CMF C40 H57 N5 O2

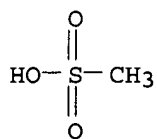
Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 851645-45-9 CAPLUS

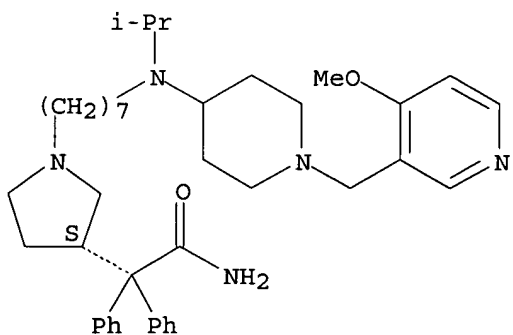
CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]-α,α-diphenyl-, (3S)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

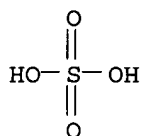
Absolute stereochemistry.



CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 851645-46-0 CAPLUS

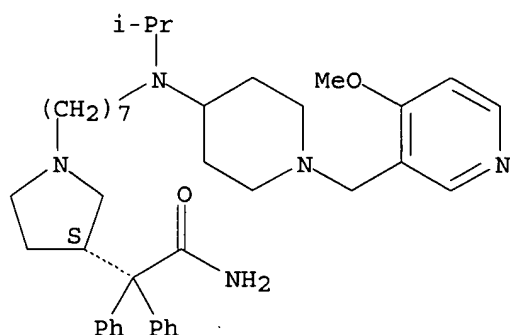
CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-, (3S)-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

Absolute stereochemistry.

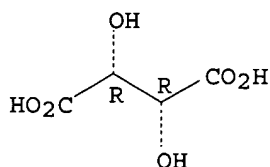


CM 2

CRN 87-69-4

CMF C4 H6 O6

Absolute stereochemistry.



RN 851645-47-1 CAPLUS

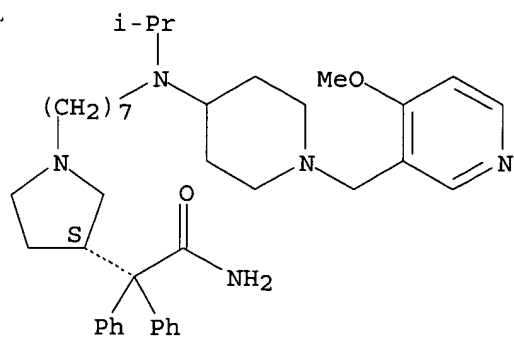
CN 4-Pyrimidinecarboxylic acid, 1,2,3,6-tetrahydro-2,6-dioxo-, compd. with (3S)-1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-3-pyrrolidineacetamide (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

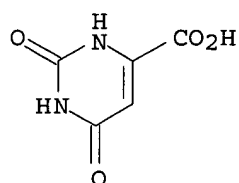
Absolute stereochemistry.



CM 2

CRN 65-86-1

CMF C5 H4 N2 O4



RN 851645-48-2 CAPLUS

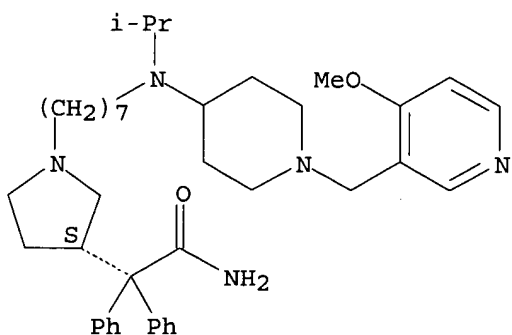
CN Benzoic acid, 2-hydroxy-, compd. with (3S)-1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl](1-methylethyl)amino]heptyl]- α,α -diphenyl-3-pyrrolidineacetamide (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

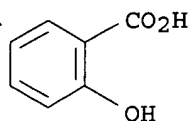
Absolute stereochemistry.



CM 2

CRN 69-72-7

CMF C7 H6 O3



RN 851645-51-7 CAPLUS

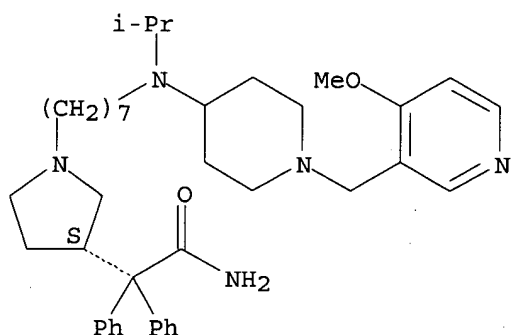
CN 1,5-Naphthalenedisulfonic acid, compd. with (3S)-1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl] (1-methylethyl)amino]heptyl]- α,α -diphenyl-3-pyrrolidineacetamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 690999-15-6

CMF C40 H57 N5 O2

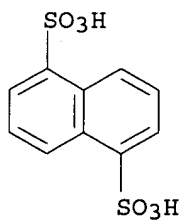
Absolute stereochemistry.



CM 2

CRN 81-04-9

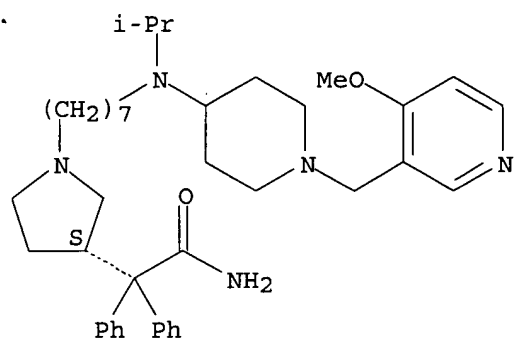
CMF C10 H8 O6 S2



RN 851645-55-1 CAPLUS

CN 3-Pyrrolidineacetamide, 1-[7-[[1-[(4-methoxy-3-pyridinyl)methyl]-4-piperidinyl] (1-methylethyl)amino]heptyl]- α,α -diphenyl-, dihydrochloride, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HCl